

United States Patent and Trademark Office

UNITED STATES DEPARTMENT OF COMMERCE United States Raten and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

ATTORNEY DOCKET NO. CONFIRMATION NO. APPLICATION NO. FILING DATE FIRST NAMED INVENTOR MS174293.1 5228 06/28/2001 Raja Krishnaswamy 09/893,829 **EXAMINER** 09/29/2005 27195 7590 AMIN & TUROCY, LLP EL HADY, NABIL M 24TH FLOOR, NATIONAL CITY CENTER **ART UNIT** PAPER NUMBER 1900 EAST NINTH STREET CLEVELAND, OH 44114 2152

DATE MAILED: 09/29/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

		•
	Application No.	Applicant(s)
Office Action Summary	09/893,829	KRISHNASWAMY ET AL.
	Examiner	Art Unit
	Nabil M. El-Hady	2152
The MAILING DATE of this communication eriod for Reply	appears on the cover sheet w	vith the correspondence address
A SHORTENED STATUTORY PERIOD FOR REWHICHEVER IS LONGER, FROM THE MAILING - Extensions of time may be available under the provisions of 37 CFF after SIX (6) MONTHS from the mailing date of this communication. - If NO period for reply is specified above, the maximum statutory period for reply within the set or extended period for reply will, by static Any reply received by the Office later than three months after the meanned patent term adjustment. See 37 CFR 1.704(b).	G DATE OF THIS COMMUNI R 1.136(a). In no event, however, may a bried will apply and will expire SIX (6) MOI tratute, cause the application to become A	reply be timely filed NTHS from the mailing date of this communication. BANDONED (35 U.S.C. § 133).
tatus		
1) Responsive to communication(s) filed on 2	/23/2005.	
	This action is non-final.	
3) Since this application is in condition for allo	wance except for formal mat	ters, prosecution as to the merits is
closed in accordance with the practice unde	er <i>Ex parte Quayle</i> , 1935 C.[D. 11, 453 O.G. 213.
isposition of Claims		
4)⊠ Claim(s) <u>1-24,26 and 27</u> is/are pending in t	he application.	
4a) Of the above claim(s) is/are with	drawn from consideration.	
5) Claim(s) is/are allowed.		
6)⊠ Claim(s) <u>1-24,26 and 27</u> is/are rejected.		
7) Claim(s) is/are objected to.		
8) Claim(s) are subject to restriction an	nd/or election requirement.	
pplication Papers		
9)☐ The specification is objected to by the Exam	niner.	•
10) The drawing(s) filed on is/are: a) a	accepted or b) objected to	by the Examiner.
Applicant may not request that any objection to	the drawing(s) be held in abeyar	nce. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the cor 11) The oath or declaration is objected to by the	•	
riority under 35 U.S.C. § 119		
12) ☐ Acknowledgment is made of a claim for fore a) ☐ All b) ☐ Some * c) ☐ None of:	eign priority under 35 U.S.C. §	§ 119(a)-(d) or (f).
1. Certified copies of the priority docume	ents have been received.	
2. Certified copies of the priority docume	ents have been received in A	Application No
3. Copies of the certified copies of the p	priority documents have been	received in this National Stage
application from the International Bur	` ''	
* See the attached detailed Office action for a	list of the certified copies not	received.
tachment(s)		
Notice of References Cited (PTO-892)		Summary (PTO-413)
	Paper No(Summary (PTO-413) s)/Mail Date nformal Patent Application (PTO-152)

Application/Control Number: 09/893,829 Page 2

Art Unit: 2152

1. A notice of withdrawal from issue under 37 CFR 1.313(b) was mailed to applicant on July 20, 2005. This application is being withdrawn to permit reopening of prosecution, because the application contains at least one claim that is unpatentable.

- 2. Claims 1-27 are pending in this application. In examiner's amendment of 6/2/2005, claims 24 and 26 are amended and claim 25 is cancelled. Claims 1-24, 26, and 27 are now presented for examination.
- 3. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

- 4. Claim 14 is rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter. The computer readable medium as disclosed in the specification, page 28, lines 28-32, comprises a communication media, which can be carrier wave. Carrier wave represent a non-statutory subject matter.
- 5. Claim 23 is rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter. The computer readable medium as disclosed in the specification, page 28, lines 28-32, comprises a communication media can be carrier wave. Carrier wave represent a non-statutory subject matter.
- 6. Claims 1-24, 26, and 27 are rejected under 35 U.S.C. 102(e) as being anticipated by Cohen et al. (6,324,543), hereinafter "Cohen".

Application/Control Number: 09/893,829 Page 3

Art Unit: 2152

7. Cohen is cited by the examiner in a previous office action.

- 8. As per claim 1, Cohen discusses a system for interacting with an object (col. 2, lines 32), the system comprising: a method call interceptor (col. 2, lines 1-5; col. 3, lines 57-63, proxy B'), operable to intercept a method call to an object and to route the method call to a proxy (col. 2, lines 1-5; col. 3, lines 57-63, proxy B"), the method call interceptor accessible to application code (e.g. col. 2, lines 1-10); and an application code generic proxy operable to receive an intercepted method call (col. 2, lines 1-5; col. 3, lines 57-63, proxy B"), the application code generic proxy further operable to invoke a method on the object (method foo() of col. 3, lines 34-62; and col. 7, lines 7-9), to receive results from the object and to pass results to the entity that generated the intercepted method call (col. 3, line 61; and e.g. col. 7, lines1-12). Cohen also reads on claim 1 by interpreting the "local proxy" as the "method call interceptor", the "remote proxy" as the "application code generic proxy". The remote proxy invokes the method of the request of object and returns the result to the entity that generated the request (through the "local proxy"). The claim language does not exclude the returning of the results through the interceptor nor that the interceptor only role is to intercept the call as argued in applicant argument in the appeal brief.
- 9. As per claim 14, the claim is rejected for the same reasons as claim 1 above.
- 10. As per claim 15, the claim is rejected for the same reasons as claim 1 above.
- 11. As per claim 23, the claim is rejected for the same reasons as claim 1 above.

Application/Control Number: 09/893,829

Art Unit: 2152

12. As per claim 27, the claim is rejected for the same reasons as claim 1 above.

Page 4

- 13. As per claim 24, the claim is rejected for the same reasons as claim 1 above. In addition, it is inherent in Cohen's disclosure that data packets transmitted between computer processes comprise identifier/value pair providing information associated with an intercepted method call on an object. The call information data store with at least one of a method name, one or more input parameters, a count of the number of input parameters, one or more type identifiers associated with the input parameters, a count of the number of return parameters for the method call, one or more type identifiers associated with the return parameters, class/interface defining method data, a stack pointer and a heap pointer (e.g. col. 7, lines 1-17).
- 14. As per claims 2 and 20, Cohen discloses the object is located across a remoting boundary (e.g. col. 2, lines 1-10).
- 15. As per claims 3 and 21, Cohen discloses the object is marshaled by reference (e.g. col. 5, lines 61-67).
- 16. As per claims 4 and 22, Cohn discloses the object is marshaled by value (e.g. col. 1, lines 24-32; in the preferred embodiment Cohen uses Java to create and instantiate the objects, it is an inherent property of Java to marshal objects by value).
- 17. As per claim 5, Cohen discloses the method call interceptor is operable to populate a call information data store with information associated with the intercepted method call, the call information data store accessible to the application code generic proxy (e.g. col. 6, lines 62-67).

Art Unit: 2152

- 18. As per claim 6, Cohen discloses populating the call information data store with at least one of a method name, one or more input parameters, a count of the number of input parameters, one or more type identifiers associated with the input parameters, a count of the number of return parameters for the method call, one or more type identifiers associated with the return parameters, class/interface defining method data, a stack pointer and a heap pointer (e.g. col. 7, lines 1-17).
- 19. As per claims 7 and 26, Cohen discloses the call information data store is a message object that can be serialized and passed across a remoting boundary (e.g. col. 7, lines 40-60).
- 20. As per claim 8, Cohen discloses the method call interceptor is operable to transfer control to a method in the application code generic proxy, where the method in the application code generic proxy overrides a base class method defined in a base class object from which the application code generic proxy inherits (e.g. col. 9, lines 1-20).
- 21. As per claims 9 and 16, Cohen discloses the application code generic proxy is operable to perform proxy pre-processing before invoking the method on the object (e.g. col. 6, lines 57 67).
- 22. As per claims 10 and 17, Cohen discloses the proxy pre-processing comprises at least one of load-balancing, transaction processing, object migration, object persisting, monitoring remote method calls, caching remote data, controlling remote method call invocations and machine learning involved in optimizing remote method call invocation (e.g. col. 5, lines 61-67).

Page 6

Art Unit: 2152

- 23. As per claims 11 and 18, Cohen discloses the application code generic proxy is operable to perform proxy post-processing after receiving the results from the object (e.g. col. 7, lines 8-16).
- 24. As per claims 12 and 19, Cohen discloses the proxy-processing comprises at least one of auditing, transaction processing, object migration, object persisting, monitoring remote method calls, caching local data, caching remote data, controlling remote method call invocations and machine learning involved in optimizing remote method call invocation (e.g. col. 7, lines 8-12).
- 25. As per claim 13, Cohen discloses the application code generic proxy invokes the method on the object by invoking a method available in a remoting infrastructure (e.g. col. 8, lines 18-23).
- 26. Claims 1, 14, 15, 23, 24, and 27 are further rejected under 35 U.S.C. 102(e) as being anticipated by Moore et al. (US 6,282,581), hereinafter "Moore".
- 27. As per claim 1, Moore discusses a system for interacting with an object (abstract; and Fig. 5), the system comprising: a method call interceptor (communication framework 257, Fig. 3), operable to intercept a method call to an object and to route the method call to a proxy (col. 7, lines 58-67), the method call interceptor accessible to application code (col. 7, lines 58-67); and an application code generic proxy operable to receive an intercepted method call (col. 8, lines 8-120; and Fig. 3), the application code generic proxy further operable to invoke a method

Art Unit: 2152

on the object (col. 8, lines 31-36), to receive results from the object and to pass results to the entity that generated the intercepted method call (Fig. 4 and Fig. 5).

- 28. As per claim 14, the claim is rejected for the same reasons as claim 1 above.
- 29. As per claim 15, the claim is rejected for the same reasons as claim 1 above.
- 30. As per claim 23, the claim is rejected for the same reasons as claim 1 above.
- 31. As per claim 27, the claim is rejected for the same reasons as claim 1 above.
- 32. As per claim 24, the claim is rejected for the same reasons as claim 1 above. In addition, Moore discloses that data packets transmitted between computer processes comprise identifier/value pair providing information associated with an intercepted method call on an object. The call information data store with at least one of a method name, one or more input parameters, a count of the number of input parameters, one or more type identifiers associated with the input parameters, a count of the number of return parameters for the method call, one or more type identifiers associated with the return parameters, class/interface defining method data, a stack pointer and a heap pointer (Arglist class 261 and Arglist 701 of Fig. 7).
- 33. Applicant's arguments filed 2/23/2005 have been fully considered but they are not persuasive. Therefore rejection of claims 1-24, 26, and 17 is maintained.

- 34. In the remarks, applicants argued in substance that (1), Cohen does not disclose a method call interceptor rather, he discloses a generated proxy intercepts the call method; (2) Cohen does not teach or suggest the application code generic proxy operable to receive an intercepted method call; (3) Cohen does not teach invoking a method on an object by the application code generic proxy.
- 35. Examiner respectfully traverses applicants' remarks. As to point (1), as explained above in the rejection of the claims, Cohen discloses a method call interceptor (designated as the local generated proxy e.g. B' in col. 3, lines 57-63, proxy B'). As to point (2), Cohen discloses the application code generic proxy (col. 3, lines 57-63, proxy B"), operable to receive an intercepted method call (col. 3, lines 59-60). As to point (3), Cohen discloses invoking a method on an object by the application code generic proxy (method foo() of col. 3, lines 34-62; and col. 7, lines 7-9). Cohen also reads on claim 1 by interpreting the "local proxy" as the "method call interceptor", the "remote proxy" as the "application code generic proxy". The remote proxy invokes the method of the request of object and returns the result to the entity that generated the request (through the "local proxy"). The claim language does not exclude the returning of the results through the interceptor nor that the interceptor only role is to intercept the call as argued in applicant argument in the appeal brief.
- 36. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Nabil M. El-Hady whose telephone number is (571) 272-3963. The examiner can normally be reached on 9:00 4:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Follansbee can be reached on (571) 272-3964. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 2152

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

September 27, 2005

Nabil El-Hady, Ph.D, M.B.A.

Primary Examiner Art Unit 2152